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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/623,865	11/08/2000	Otto Plank	PA 29584	9306

7590

12/29/2003

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EXAMINER
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COZART, JERMIE E

ART UNIT	PAPER NUMBER
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3726

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DATE MAILED: 12/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/623,865

Applicant(s)

PLANK, OTTO

Examiner

Jermie Cozart

Art Unit

3726

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 04 September 2003 and 01 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 7-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 7-12 and 14-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE 4,202,279 (DE`279) in view of Ashby et al.

DE`279 discloses producing a rim hole through a first and second planar workpiece (11, 12), providing an oblong rim hole (not labeled) by translating an oblong punch (7) in a first direction, from a first position to a second position relative to a fixed matrix (2). DE`279 also discloses forming an oblong rim hole using the first planar workpiece (11) such that the oblong rim is formed adjacent to an inner surface of the matrix (2), and forming the oblong rim into a single layer flange engageable with a bottom surface of the second planar workpiece (12). The flange is formed using an oblong flange punch (50). The flange punch engages the flange from a second direction that is linearly opposite the first direction. DE`279 discloses the oblong punch (7) having a first working surface (17) to form a penetration opening and a second working surface (16) to form the oblong rim adjacent to the inner surface of the matrix (2). *See abstract and Figures 1, 2, and 6 for further clarification.*

DE`279, however, does not disclose forming an oblong penetration opening through the first and second planar workpieces by translating an oblong punch in a first

direction to a first position, forming against a working edge of the fixed matrix, an oblong break away portion in the second planar workpiece. DE`279 also does not disclose whether the first and second planar workpieces are metal, providing a round penetration, punching the rim hole using a round punch, the round penetration hole being formed using a punch having a transition surface and a body surface. DE`279 also does not disclose the transition surface engaging at least one of the plurality of planar workpieces to promote the separation of the annular break away and form the annular rim adjacent to the body surface, or the annular break away being formed against a working surface of the matrix and the annular rim being formed adjacent to an inner surface of the matrix.

Ashby discloses forming a penetration opening (not labeled) through the first and second planar workpieces (82, 84) by translating the punch (54) in a first direction to a first position, forming against a working edge of the fixed matrix (74), a break away portion (88) in the second planar workpiece. Ashby discloses the first and second planar workpieces (82, 84) being metal, and providing a round penetration, punching the rim hole using a round punch (54), the round penetration hole being formed using a punch having a transition surface and a body surface. Ashby discloses disclose the transition surface (not labeled) engaging at least one of the plurality of planar workpieces (82, 84) to promote the separation of the annular break away and form the annular rim adjacent to the body surface, and the annular break away (88) being formed against a working surface of the matrix (74) and the annular rim being formed adjacent

to an inner surface of the matrix. See *column 4, line 23 – column 5, line 30, and Figures 6-8 for further clarification.*

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to form the penetration opening of DE`279 through the first and second planar workpieces by translating an oblong punch in a first direction to a first position, form a break away portion in the second planar workpiece against a working edge of the fixed matrix, to form the first and second planar workpieces from metal, to provide a round penetration, to punch the rim hole using a round punch, such that the round penetration hole is formed using a punch having a transition surface and a body surface, wherein the transition surface engages at least one of the plurality of planar workpieces to promote the separation of the annular break away and form the annular rim adjacent to the body surface, such that the annular break away is formed against a working surface of the matrix and the annular rim is formed adjacent to an inner surface of the matrix, in light of the teachings of Ashby, in order to effectively fasten together two sheets by deformation.

**Claims 7-11 and 17-21**

DE`279/Ashby as modified discloses all of the claimed subject matter except for producing an oblong rim hole and oblong break away.

At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to provide the punch with a configuration capable of producing an oblong rim hole and oblong break away because Applicant has not disclosed that producing an oblong rim hole and oblong break away provides an advantage, is used for a particular purpose, or

solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with an rim hole and annular break away in order to effectively fasten the two metal sheets together.

Therefore, it would have been an obvious matter of design choice to modify DE`279/Ashby to obtain the invention as in claims 7-11 and 17-21.

3. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over DE`279/Ashby as applied to claims 1-12 and 14-21 above, and further in view of Speller, Sr. (5,042,137).

DE`279/Ashby as modified above discloses all of the claimed subject matter except for the round penetration opening being formed using a circular drill.

Speller, Sr. discloses a round penetration opening being formed using a circular drill (40). *See column 8, lines 48-65, and Figures 1 and 9 for further clarification.*

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to form the round penetration opening of DE`279/Ashby using a circular drill, in light of the teachings of Speller, Sr., in order to effectively provide an alignment to aid in assembly.

### ***Response to Arguments***

4. Applicant's arguments filed 9/4/03 have been fully considered but they are not persuasive.

Applicant argues that Bosch (DE 4,202,279) does not disclose forming an oblong hole of any type, much less an oblong rim as recited by claims 7 and 17.

In response, the Examiner maintains that Bosch (DE`279) does disclose an oblong rim hole (not labeled), because the rim hole is initially formed by the oblong punch (7). The construction of the punch (17) of DE`279 in combination with the matrix (2) allows for the formation of an oblong rim hole.

Applicant also argues that Ashby does not suggest or disclose producing a break away when an additional piece of material of the second planar work-piece is broken out during the single feed-step translation of the punch relative to the matrix.

In response, the Examiner maintains that Ashby does disclose producing a break away (88) wherein additional piece (i.e. break away portion 88) of material of the second planar work-piece (84) is broken out during the single feed-step translation of the punch relative to the matrix (74).

Applicant also argues that the cited combination of DE`279, Ashby, and Speller, Sr. does not establish a prima facie case of obviousness because Speller, Sr. does not disclose a rim hole.

In response the Examiner maintains that Speller was used to provide the round opening in DE`279/Ashby by using a circular drill, in order to effectively provide an alignment indicator to aid in assembly of the work-pieces. Also, in response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Telephone inquiries regarding the status of applications or other general questions, by persons entitled to the information, should be directed to the group clerical personnel. In as much as the official records and applications are located in the clerical section of the examining groups, the clerical personnel can readily provide status information. M.P.E.P. 203.08. The Group clerical receptionist number is (703) 308-1148.

7. If in receiving this Office Action it is apparent to applicant that certain documents are missing, e.g., copies of references cited, form PTO-1449, form PTO-892, etc., requests for copies of such papers or other general questions should be directed to Tech Center 3700 Customer Service at (703) 306-5648, or fax (703) 872-9301 or by email to [CustomerService3700@uspto.gov](mailto:CustomerService3700@uspto.gov).



8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jermie Cozart whose telephone number is 703-305-0126. The examiner can normally be reached on Monday-Thursday, 7:30 am - 6:00 pm.

9. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 703-308-1789. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.

Other helpful telephone numbers are listed for applicant's benefit.

Allowed Files & Publication	(703) 308-6789 or (888) 786-0101
Assignment Branch	(703) 308-9723
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If the information desired is not provided above, or a number has been changed, please call the general information help line below.

Information Help line	1-800-786-9199
Internet PTO-Home Page	<a href="http://www.uspto.gov">http: www.uspto.gov</a>



**DAVID P. BRYANT**  
**PRIMARY EXAMINER**

JC   
December 23, 2003